

AMENDMENTS TO CLAIMS

- Please amend pending claims 1 and 6 as indicated below. A complete listing of all claims and their status in the application are as follows:

1. (currently amended) A method of testing an integrated circuit comprising:
providing a semiconductor substrate having a semiconductor device provided thereon;
forming a first dielectric layer over the semiconductor substrate;
forming a first channel in the first dielectric layer in contact with the semiconductor device;
forming a first contact pad mask layer;
forming a first contact pad in the first contact pad mask layer in contact with the first channel;
using the first contact pad to test the first channel and the semiconductor device;~~and~~
removing the first contact pad mask layer and the first contact pad;
forming a second dielectric layer over the semiconductor substrate;
forming a second channel in the second dielectric layer in contact with the semiconductor device;
forming a second contact pad mask layer; and
forming a second contact pad in the second contact pad mask layer in contact with the channel.
2. (original) The method as claimed in claim 1 additionally comprising:
using a tester having a microprobe; and
wherein:
using the first contact pad includes forming the first contact pad for contact by the microprobe.
3. (original) The method as claimed in claim 1 additionally comprising:
forming the first contact pad mask layer uses a photoresist.
4. (original) The method as claimed in claim 1 additionally comprising:
forming the first contact pad forms a material selected from a group consisting of copper, aluminum, gold, silver, a compound thereof, and a combination thereof.
5. (original) The method as claimed in claim 1 wherein:
removing the first contact pad mask layer and the first contact pad uses polishing.

6. (currently amended) The method as claimed in claim 1 additionally comprising:
~~forming a second dielectric layer over the semiconductor substrate;~~
~~forming a second channel in the second dielectric layer in contact with the semiconductor device;~~
~~forming a second contact pad mask layer;~~
~~forming a second contact pad in the second contact pad mask layer in contact with the channel;~~
using the second contact pad to test the second channel; and
removing the second contact pad mask layer and the second contact pad.
7. (original) The method as claimed in claim 6 additionally comprising:
using a tester having a microprobe; and
wherein:
using the second contact pad includes forming the second contact pad for contact by the microprobe.
8. (original) The method as claimed in claim 6 additionally comprising:
forming the second contact pad mask layer uses a photoresist.
9. (original) The method as claimed in claim 6 additionally comprising:
forming the second contact pad uses a material selected from a group consisting of copper, aluminum, gold, silver, a compound thereof, and a combination thereof.
10. (original) The method as claimed in claim 6 wherein:
removing the second contact pad mask layer and the second contact pad uses polishing.
11. (original) The method as claimed in claim 1 additionally comprising:
forming a via dielectric layer over the semiconductor substrate;
forming a via in the via dielectric layer in contact with the semiconductor device;
forming a second dielectric layer over the via dielectric layer;
forming a second channel in the second dielectric layer contiguous with the via;
forming a second contact pad mask layer;
forming a second contact pad in the second contact pad mask layer in contact with the second channel;
using the second contact pad to test the via and second channel; and
removing the second contact pad mask layer and the second contact pad.

12. (original) The method as claimed in claim 11 additionally comprising:
using a tester having a microprobe; and
wherein:
using the second contact pad includes forming the second contact pad for contact by the
microprobe.
13. (original) The method as claimed in claim 11 additionally comprising:
forming the second contact pad mask layer uses a photoresist.
14. (original) The method as claimed in claim 11 additionally comprising:
forming the second contact pad forms a material selected from a group consisting of copper,
aluminum, gold, silver, a compound thereof, and a combination thereof.
15. (original) The method as claimed in claim 11 wherein:
removing the second contact pad mask layer and the second contact pad uses polishing.
16. (original) A method of testing an integrated circuit comprising:
providing a semiconductor substrate having a semiconductor device provided thereon;
forming a device dielectric layer over the semiconductor substrate by deposition;
forming a first dielectric layer over the device dielectric layer by deposition;
forming a contact to the semiconductor device in the device dielectric layer;
forming a first channel in the first dielectric layer in contact with the contact;
forming a via dielectric layer over the first dielectric layer;
forming a via in the via dielectric layer in contact with the first channel;
forming a second dielectric layer over the via dielectric layer;
forming a second channel in the second dielectric layer contiguous with the via;
forming a contact pad mask layer over a layer selected from the group consisting of the first
dielectric layer, the via layer, the second dielectric layer, and a combination thereof;
forming a contact pad in the contact pad mask layer in contact with an element selected from
a group consisting of the first channel, the via, the second channel, and a
combination thereof;
using the contact pad to test an element from a group consisting of the semiconductor device,
the contact, the first channel, the via, the second channel, and a combination thereof;
and
removing the contact pad mask layer and the contact pad; and
completing the integrated circuit.

17. (original) The method as claimed in claim 16 additionally comprising:

using a tester having a microprobe; and

wherein:

forming the contact pad includes forming the contact pad for contact by the microprobe.

18. (original) The method as claimed in claim 16 additionally comprising:

forming the contact pad mask layer uses a photoresist.

19. (original) The method as claimed in claim 16 wherein:

forming the contact pad forms a material selected from a group consisting of copper, aluminum, gold, silver, a compound thereof, and a combination thereof.

20. (original) The method as claimed in claim 16 wherein:

removing the contact pad mask layer and the contact pad uses chemical mechanical polishing.